

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number  
**WO 2005/044874 A1**

(51) International Patent Classification<sup>7</sup>:  
A01N 35/02, A61P 31/04, A61K 31/78

C08F 16/34,

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:  
PCT/AU2004/001537

(22) International Filing Date:  
5 November 2004 (05.11.2004)

(25) Filing Language:  
English

(26) Publication Language:  
English

(30) Priority Data:  
2003906117 6 November 2003 (06.11.2003) AU

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*):  
CHEMEQ LTD [AU/AU]; Suite 8, Petroleum House, 3 Brodie Hall Drive, Technology Park, Bentley, W.A. 6102 (AU).

(72) Inventor; and

Published:

(75) Inventor/Applicant (*for US only*): TILBROOK,  
Matthew [AU/AU]; 74 Wellington Street, Mosman Park,  
W.A. 6012 (AU).

- with international search report
- with amended claims

(74) Agent: PHILLIPS ORMONDE & FITZPATRICK; 367 Collins Street, Melbourne, VIC 3000 (AU).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/044874 A1

(54) Title: METHOD OF MANUFACTURE OF POLYACROLEIN

(57) Abstract: A method of manufacture of soluble, microbiologically active and stable acrolein polymer comprising: (a) polymerising acrolein in the presence of base to form a polymer of acrolein; (b) dissolving the polymer of acrolein in an alcohol selected from monoalcohols and polyols optionally with addition of water to form an alcohol solution of the polymer of acrolein; (c) heating the alcohol solution of the polymer of acrolein; and (d) mixing base with the polymer of acrolein.